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ABSTRACT

An intensive investigation of the impact Army service has had on the quality of life for a representative sample of young Americans is analyzed in terms of possible improvement in Army personnel procedures. A total of 166 men (of a potential 200) and 49 women (of a potential 50) were interviewed. The information from these interviews; a review of interviewee lives before, during, and after Army service to about the age of 30; and Project TALENT (a 1960 national survey of high school students) information have been analyzed. Background and purpose of the study, a definition of the information required, a description of the sample group, procedures for collecting the data and the results of its analysis, and the impact of Army service on present quality of life are discussed. A summary indicates that, for the group as a whole, Army service had a positive effect on their subsequent quality of life. Results imply that the Army could improve in its career guidance and training programs and thus have an opportunity to make a significant improvement in the life planning activities of many of the nation's young people. One table and five figures supplement the discussion. (LH)

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Technical Paper 263

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QUALITY OF LIFE AS PERCEIVED BY 30 YEAR OLD ARMY VETERANS

Sandra Reitz Wilson and John C. Flanagan
American Institutes for Research

and

J. E. Uhlaner
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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

This study was an intensive investigation of the impact of Army service on the quality of life of a representative sample of young Americans. A sample of 200 men and 50 women who had participated in the Project TALENT national survey of secondary school students in March 1960 and were known to have entered the Army before 1968 was selected to be representative of all such individuals. Each of these persons who could be located and for whom an interview could be scheduled--a total of 166 men and 49 women--participated in a three-hour inter-

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20. view. The information from this interview, including a review of their lives before, during, and after Army service to about age 30, was analyzed along with the Project TALENT information from the computer tape data bank.

For the group as a whole Army service had a positive effect on their quality of life. They reported that their needs were Very Well Met for five of the six components of the quality of life (in a set of 18) that they rated as most important to them: Health and Personal Safety, Relations with Wife, Occupational Role, Understanding and Appreciating Self, and Material Well-Being and Security for the Future. The component rated as only Well Met was Having and Raising Children.

Half the men who volunteered for Army service had no career or job plans at the time they entered the Army. About 45% of the men, when asked what changes in Army procedure would have been most helpful to them, indicated they would like to see changes in the classification system that would help them get more meaningful information on their own interests and abilities in relation to Army opportunities.

Only 40% of the women in this sample completed their first enlistment in the Women's Army Corps. Nearly half the women left because of marriage or pregnancy.

Technical Paper 263

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Office, Deputy Chief of Staff for Personnel
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FOREWORD

Among the many concerns of the U. S. Army Research Institute for the Behavioral and Social Sciences (ARI) are problems of social dynamics and interactions that affect military competence and morale as well as effectiveness of training. Recent efforts have been designed to provide an overall methodology for a wide-ranging program of systematic research as well as specific information on such areas as indicators of the quality of life of enlisted personnel. The present Technical Paper continues the study of the quality of life in the U. S. Army, in an intensive investigation of the impact of Army service on the quality of life for a representative sample of veterans--draftees and volunteers, men and women--who entered the Army before 1968 and have thus had an opportunity to evaluate their military service in terms of its effects on the quality of their later lives. The perceptions of these effects of military life and the Army training they received have implications and utility for possible improvements in Army personnel procedures especially in the areas of career guidance, training, recruiting, classification, and manpower utilization.

Research is conducted under Army RDTE Project 2Q161102B74E, Basic Research in Social Sciences, FY 1974 Work Program. The research in this area is conducted as an in-house effort augmented by contracts with organizations selected as having unique capabilities in the area. The present study was conducted jointly by personnel of the American Institutes for Research and the Army Research Institute.

J. E. UHLANER
Technical Director

QUALITY OF LIFE AS PERCEIVED BY 30 YEAR OLD ARMY VETERANS

BRIEF

Requirement:

To perform an intensive investigation of the impact of Army service on the quality of life of a representative sample of young Americans and to analyze the implications of these findings for possible improvement in Army personnel procedures.

Procedure:

A sample of 200 men and 50 women who had participated in the Project TALENT national survey of secondary school students in March 1960 and were known to have entered the Army before 1968 was selected to be representative of all such individuals. Each of these persons who could be located and for whom an interview could be scheduled--a total of 166 men and 49 women--participated in a three-hour interview. The information from this interview, including a review of their lives before, during, and after Army service to about age 30, was analyzed along with the Project TALENT information from the computer tape data bank.

Findings:

The principal finding is that for the group as a whole Army service had a positive effect on their quality of life. They reported that their needs were Very Well Met for all but one of the six components of quality of life (in a set of 18) that they rated as most important to them. The components so rated were Health and Personal Safety, Relations with Wife, Occupational Role, Understanding and Appreciating Self, and Material Well-Being and Security for the Future. The component rated as only Well Met was Having and Raising Children.

It was found that half the men who volunteered for Army service had no career or job plans at the time they entered the Army. About 45% of the men when asked what changes in Army procedures would have been most helpful to them indicated they would like to see changes in the classification system that would help them get more meaningful information on their own interests and abilities in relation to Army opportunities.

Only 40% of the women in this sample completed their first enlistment in the Women's Army Corps. Nearly half the women left because of marriage or pregnancy.

Utilization of Findings:

Several areas of possible improvement in Army programs expected to make significant contributions to the quality of life of its recruits and at the same time improve the efficiency and overall effectiveness of Army operations were identified. These relate primarily to the classification and training programs. The new classification program already meets some of the needs identified in this study, but some additional improvements appear to be needed.

QUALITY OF LIFE AS PERCEIVED BY 30 YEAR OLD ARMY VETERANS

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BACKGROUND AND PURPOSES OF THE STUDY

The purpose of the research described in this report was to make an intensive study of the impact of Army service on the lives of a representative sample of young Americans. The research focused on the current lives of these individuals and sought to determine what contributions were or might have been made by the Army experience.

To obtain an in-depth study of the question of the impact of Army Service on present quality of life of these men, a sample of 200 men and 50 women who had served in the Army was selected from the nationally representative Project TALENT sample of 400,000 individuals who were in high school in 1960. These 250 men and women were selected so as to make up a group which would be broadly representative of the types of young Americans of about 30 years of age who have served in the Army in the enlisted ranks.

Through their participation in Project TALENT, much was already known about each of these individuals. Several thousand items of information on their individual abilities, interests, family background, educational experiences, and plans existed in their TALENT data tape files as a result of the two days of testing in 1960. As a result of periodic mail questionnaire follow-up of the TALENT group additional information existed on their past high school, educational, occupational, military, family, and other experiences.

The intent of the study was to supplement the available TALENT data with detailed information on each person's military experiences and his present life activities, satisfactions, dissatisfactions, and plans. Each person was also asked to evaluate his Army training and experiences and to describe what effect it had on his life. The individuals in the sample selected were re-located, contacted by telephone, and asked to participate in an interview covering the topics just outlined. The actual interviews were conducted in the local area by a trained interviewer secured especially for that purpose. The returned interviews were combined by project staff with the existing TALENT data in the files for the individual and analyzed to determine:

(1) The background characteristics of the group and the effects of these characteristics on their Army experiences;

(2) The Army situations and conditions which contribute in a positive or negative way to personal growth and development;

(3) The recommendations suggested by these analyses which would improve the impact of Army service on their lives; and

(4) The relative quality of life of this group as compared with that of a roughly matched control group which did not have Army service.

The advantages of this type of longitudinal and individual-based approach to gaining a better understanding of the types of personnel recruited into the Army and the impact of this service experience on both their performance in the Army and their subsequent lives were obvious. Since most of these men served in the Army between 1963 and 1968 the study of their experiences is not intended to evaluate recent changes in the Army. Since something more than half of this group were volunteers and since many things regarding Army service do not change greatly in a period of ten years, it is believed that much can be learned from this type of study. The insights afforded by examining the lives of these individuals both before and after Army service provide a perspective which is probably useful to so important a national institution as the Army.

A brief review of some previous studies of basic issues. There have been a number of studies such as those of Sharp [1] and Claudy [2] that indicate yearly earnings for men with and without military service. In general, with exceptions for women and minorities, those with military service tend to be earning less at the time of the post-service survey. However, in most cases a large part of this difference can be attributed to the smaller number of years those with service have had in their present civilian occupation. Similar findings with the same explanation are reported for those serving shortly after high school as compared with those serving at a later time.

A study by Wool [3] points out the degree of overlap between military and civilian jobs. Although there are a number of military jobs with civilian counterparts, it is clear from his analysis that the military cannot expect to provide a type of training and experience to all of its

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[1] Sharp, L. M. The role of military service in the careers of college graduates. Chapter V of L. M. Sharp, Education and employment: The early careers of college graduates. Baltimore: The Johns Hopkins Press, 1970.

[2] Claudy, J. G. Project TALENT and SABER volunteer: Data correlations/ research. Palo Alto, Calif.: American Institutes for Research, 1973.

[3] Wool, H. The military specialist: Skilled manpower for the armed forces. Baltimore: The Johns Hopkins Press, 1968.

personnel that can be utilized in a civilian occupation. A review of Project 100,000 by Sullivan[4] reported that men brought in under somewhat relaxed mental and physical qualification standards performed their duties satisfactorily. There were small additional costs for training, higher attrition rates, and more disciplinary problems. However, with appropriate adjustments the overall effect on operations appeared minimal.

The follow-up of Project TALENT participants five years after their class graduated from high school included 80 men planning a career as an enlisted man in the military. The highest interests (about the 60th percentile for the national group) of these men when in high school were in skilled trades, labor, mechanical-technical, music, and office work. Their highest ability scores (around the 50th percentile for the national group) were in Visualization in Three Dimensions, Creativity, and Mechanical Reasoning. Their high school grades, study habits, and socioeconomic status were all at about the 40th percentile for the national group. An interesting finding was that the amount of extra-curricular reading they reported when in high school was well above average (the 67th percentile), and their knowledge of literature was also slightly above average, although their vocabularly and English scores were at about the 40th percentile. The above data are reported in the Career Data Book.[5]

Several recent studies have dealt with what the military personnel like and don't like about service conditions and proposed changes in these. Gitter and Pinto[6] report that Army enlisted men indicate that they are most satisfied with the present education, work, and food. They indicated the category most likely to need change was tours of duty. They reported most dissatisfaction with present leadership and equal treatment.

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[4] Sullivan, J. A. Qualitative requirements of the armed forces. In Studies prepared for the President's Commission on an All-Volunteer Armed Force. Vol. 1. November 1970.

[5] Flanagan, J. C., D. V. Tiedeman, M. B. Willis, and D. H. McLaughlin. The career data book: Results from Project TALENT's five-year follow-up study. Palo Alto, Calif.: American Institutes for Research, 1973.

[6] Gitter, A. G. and S. K. Pinto. Social indicators of the military: Assessing the quality of life in the U.S. Army 1973. Boston: Boston Area Academic Consortium, Inc., May 1973.

An ongoing longitudinal study on the socialization and adjustment of a group of recent volunteers to Army life has been reported.[7] About 75% of this cohort were aged 19 or under; less than 40% had received a high school diploma; 56% were white, 34% black, and 10% other minorities; and about half came from homes which grossed $8,000 or less per year. Analyses of the data collected shortly after enlistment suggested that the most important factors in making the decision to enlist included the favorable support of parents, attitude of peers, and problems in the individual's personal environment. Analysis of a parallel set of responses collected at the end of basic training indicated that the adjustment to Army life at the end of basic training was mainly a function of factors affecting physical comforts, competent leadership, and team goal orientation.

The analysis of the similar items administered at the end of Advanced Infantry Training suggested that socialization or adjustment to the Army at this point was primarily a function of the individual's satisfaction with conditions affecting physical comfort, his willingness to work hard and accept regulations, his feeling that he has some control of his fate and satisfaction with his activities, and his expressed willingness to reenlist.

A very recent study of Holz and Gitter[8] assessed the quality of life of a sample of first term enlisted men in the U. S. Army. The report was based on responses of these men to a set of attitudinal indicators of quality of Army life. The men rated 13 of the 16 dimensions of quality of Army life in the lower half, or dissatisfaction range, of the scale. The lowest rated items were haircut regulations, housing conditions, and "hurry up and wait" operating style. The highest ratings and the only ones to receive ratings above the midpoint on a scale running from Completely Dissatisfied to Completely Satisfied were Medical/Dental Care, Educational Opportunities, and Post Facilities.

The present study, in contrast to some of those mentioned above, stresses comprehensive behavioral data over about a 14-year period on a

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[7] Goodstadt, B. E., R. L. Frey, Jr., A. S. Glickman, and A. P. Romanczuk. Socialization processes and the adjustment of military personnel to Army life: A structural analysis of socialization during advanced individual training. (Phase 3, Task 4 Interim Report.) Washington, D. C.: American Institutes for Research, August 1974.

[8] Holz, R. F. and A. G. Gitter. Assessing the quality of life in the U. S. Army. (Technical Paper 256.) Arlington, Va.,: U. S. Army Research Institute for the Behavioral and Social Sciences, September 1974.

fairly representative sample of men with service in the Army. The emphasis is on assessing the contribution of Army service to the quality of life of these men as young adults about 30 years of age.

It is believed that the intensive study of this sample brings out the fact that the Army is making a positive contribution to the long range quality of life of those who serve in it and also points to several specific ways in which this contribution can be significantly increased.

DEFINING THE INFORMATION REQUIRED FOR THE STUDY

As indicated above, data were available regarding the interests, abilities, hobbies, activities, family backgrounds, and plans of these young people while they were in high school in 1960. An interview was planned to collect a little more detailed information on family background and their subsequent schooling experiences, job experiences, and social life prior to entering the Army. It was also felt that a number of questions should be asked regarding the circumstances surrounding entrance into the Army. These related to draft status, reasons for enlistment, specific experiences which precipitated enlistment, preferences among service branches, reasons for selecting the Army, special enlistment options chosen by the enlistee, and expectations about the Army.

The largest section of the three-hour interview was devoted to Army experiences. This section dealt with five major aspects of military experience: classification, training, utilization, social environment, reenlistment decisions, and effects of Army service. The last section includes information about post-separation experiences. This includes information about job history after leaving the service, leisure activities, family situation, and includes questions regarding each of the 18 components included in the preliminary definition of quality of life developed at the American Institutes for Research. Each individual was requested to rate the importance of each of these factors to him and also to indicate on a six point scale how well his needs were being met with respect to each of these 18 dimensions of quality of life.

A brief description of the source of this tentative set of factors relating to quality of life is given here. This list of factors was based on an ongoing project of the American Institutes for Research, which has as its purpose defining the factors affecting quality of life for Americans. Several hundred critical incidents--reports of events that happened or things they did that made their life notably better or worse--were gathered from about 200 persons of various ages and socio-economic levels in the San Francisco Bay area. In addition, the high school juniors in the 1960 TALENT survey were mailed 11-year post-high school follow-up questionnaires in which they were asked "What has given you the most satisfaction during the past year" and "Why was it

so satisfying?" A sample of 2,000 of these questionnaire responses were used along with the critical incidents mentioned above as a basis for formulating the 18 categories tentatively defining the quality of life. These categories are listed with a brief indication of typical contents in each dimension in Table 1.

A series of tryouts of the complete interview on a total of 12 individuals comparable to those in the Army sample was carried out in the Bay area by project staff. After each set of two or three interviews the procedures and contents were revised. The last of the revisions was printed as the final three-hour interview form.

DESCRIPTION OF THE SAMPLE

The target sample for the study was a group of 200 men and 50 women selected to be representative of men and women around 30 years of age who had served on active duty for more than six months in the Army at an enlisted or warrant officer rank. This group was drawn from the nationally representative sample of high school students who participated in Project TALENT in 1960. The selection was done in successive steps in which cases were gradually eliminated because they did not meet specific sample criteria. Some cases were also eliminated because the data required to determine whether or not that case met a particular sample criteria were not available. The detailed steps in the sample section are described in the supplementary report.[9]

Of the group of 250 men and women, 12% could not be contacted before the cut-off date for interviewing and an additional 18% either declined to be interviewed or were unavailable for an interview during the times the interview had to be scheduled. Using a stratified random procedure, replacements for these cases and those disqualified as officers or as having served less than six months were made in such a way as to retain the characteristics of the initial sample with respect to highest grade reached in high school, socioeconomic status, race, and reading comprehension score. The males in the group were selected to include only those who were 15 or 16 years old in 1960. A comparison of the original and final samples on the stratification and other variables used in the study indicated a high degree of similarity between the two groups. Thus the final sample of 166 men and 49 women can be considered broadly representative of the group originally drawn from the TALENT files and hence to be broadly representative of men and women around 30 years of age with more than six months of active Army service.

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[9] Wilson, S. R., and J. C. Flanagan. Supplementary report: Quality of life as perceived by 30 year old Army veterans. Palo Alto, Calif.: American Institutes for Research, 1974.

Table 1

CATEGORIES DEFINING QUALITY OF LIFE

PHYSICAL AND MATERIAL WELL-BEING

A. Material well-being and security for the future

Desirable home, good food, possessions, comforts, and security for the future. For most people filling these needs is primarily related to their income.

B. Health and personal safety

Freedom from sickness, physical fitness, avoiding accidents, and other health hazards. Mental health is also included. Effective treatment of health problems is a large component.

RELATIONS WITH OTHER PEOPLE

C. Relations with parents, siblings, or other relatives

Visiting, enjoying, cooperating, discussing, deciding, playing, and other interacting. The feeling of belonging and having someone to discuss things with.

D. Having and raising children

Becoming a parent, watching the development, molding, guiding, helping, appreciating, learning from them and with them, and enjoying one's children.

E. Relations with spouse (or girl friend(s)/boy friend(s))

Love, companionship, sexual satisfaction, understanding, communication, appreciation, devotion, belonging, and contentment.

F. Relations with close friends

Sharing interests, experiences, causes, and views. Giving and receiving help, favors, emotional support, and guidance. Liking, trusting, and knowing.

G. Social, community and civic activities

Helping others, serving as a volunteer. Initiating, supporting, fostering, planning, working for the improvement of opportunities for all citizens to fill their needs and improve their living conditions through both local and national group actions and organizations.

PERSONAL DEVELOPMENT

H. Intellectual activities

Learning, attending school, acquiring desired knowledge and mental abilities, graduating, problem solving, decision making, and improving understanding, comprehension, or appreciation in an intellectual area.

I. Aesthetic activities

Appreciating nature, beauty, art, music, poetry, and the

J. Spiritual experiences or beliefs

Formal religious activities, faith, church work, and beli existence of a supreme being.

K. Philosophical and ethical values

Rationality and morality, consistency in behavioral decis seeking truth from fact, logic, or meditation, and living to general guiding principles.

L. Developing skills in manual activities

Sewing, building, constructing, gardening, decorating, an food.

INDIVIDUAL FULFILLMENT

M. Understanding and appreciating self

Becoming mature, insight into and acceptance of one's ass limitations, awareness of personal growth and development realizing the ability to influence the course of one's li significantly.

N. Occupational role (job)

Having interesting, challenging, rewarding, worthwhile wo well, using abilities, producing, obtaining recognition, accomplishing.

O. Creativity

Showing ingenuity, originality, imagination, a unique and expression in music, art, writing, drama, photography, or or scientific matters.

RECREATION

P. Socializing

Communicating, entertaining at home or elsewhere, attend or other social gatherings, and meeting new people.

Q. Passive recreational activities

Watching television, reading, going to the movies, colle or other things, playing cards or other sedentary games, to entertainment or sports events.

R. Active recreational activities

Participating in sports, hiking, hunting and fishing, bo camping, vacation travel and sightseeing, performing in professional role as an entertainer, actor, or contestan a pet animal.

Table 1

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PHYSICAL AND MATERIAL WELL-BEING

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I. Aesthetic activities

Appreciating nature, beauty, art, music, poetry, and the performing arts.

J. Spiritual experiences or beliefs

Formal religious activities, faith, church work, and belief in the existence of a supreme being.

K. Philosophical and ethical values

Rationality and morality, consistency in behavioral decisions, seeking truth from fact, logic, or meditation, and living according to general guiding principles.

L. Developing skills in manual activities

Sewing, building, constructing, gardening, decorating, and preparing food.

INDIVIDUAL FULFILLMENT

M. Understanding and appreciating self

Becoming mature, insight into and acceptance of one's assets and limitations, awareness of personal growth and development, and realizing the ability to influence the course of one's life significantly.

N. Occupational role (job)

Having interesting, challenging, rewarding, worthwhile work. Doing well, using abilities, producing, obtaining recognition, and accomplishing.

O. Creativity

Showing ingenuity, originality, imagination, a unique and effective expression in music, art, writing, drama, photography, or practical or scientific matters.

RECREATION

P. Socializing

Communicating, entertaining at home or elsewhere, attending parties or other social gatherings, and meeting new people.

Q. Passive recreational activities

Watching television, reading, going to the movies, collecting stamps or other things, playing cards or other sedentary games, and going to entertainment or sports events.

R. Active recreational activities

Participating in sports, hiking, hunting and fishing, boating, camping, vacation travel and sightseeing, performing in a non-professional role as an entertainer, actor, or contestant, training a pet animal.

PROCEDURES FOR COLLECTING THE DATA

As indicated in the previous section, all of the men and women selected for the present sample had participated in Project TALENT in 1960 and had completed the mailed follow-up questionnaire five years after their class graduated from high school. These data were readily available, and printouts were prepared before the interviews took place. As mentioned previously, each individual was interviewed for approximately three hours to collect information on his activities prior to entering the Army, during his Army service, and subsequent to his Army discharge, except for the small number of individuals still in the service. Interviews took place between February and June of 1974.

The interviewing program was administered through appropriate faculty members in universities and other institutions throughout the country. The general procedure followed was to identify a local coordinator at a university or other institution as soon as one of the individuals in the sample had been located, contacted, and had agreed to the interview. This coordinator was sent a local Coordinator's Manual instructing him on the selection and training of a local interviewer. These interviewers were for the most part graduate students having training in interviewing skills. They were first given an Interviewer's Manual and a completed sample case to study. The local coordinator then checked them out with a set of prepared questions to insure that they understood the general procedures to be followed.

The 94 local coordinators and the 108 interviewers who assisted in the data collection are listed in the supplementary report, along with the institutions with which they are affiliated.

Interviews were conducted for the most part in the interviewee's home or in the office of the interviewer. The interview form included about a hundred pages, and the procedure followed was to read the questions and write down the replies of the interviewee. In a few instances tape recorders were used. In all cases the interviewer transferred his notes to another booklet, identical to the first one, in final edited form.

The quality of the interviews conducted in the field was excellent. There were no instances where a case had to be discarded because the data were not usable.

Prior to analyzing the data, a number of the open-ended questions were selected for preliminary study to develop a set of suitable categories for use in coding the responses. Senior staff performed a special analysis of the impact of the Army experience on the individual's career development. In this analysis all positive effects of Army service on occupational development were noted. Negative effects were tallied, and finally, a tally was made from each case of opportunities missed by the

Army for contributing in a positive way to the individual's occupational development. The final step, after reading the entire case history of the individual, was to rate the overall impact of Army service on the person's occupational development on a five-point scale, from "very positive" to "very negative."

Because of the length of the interview a number of checks were carried out to determine whether or not there was any tendency for the interviewee to lose interest or become careless in his answers in the latter part of the session. These analyses do not appear to give any support to the view that the latter parts of the interview were less valid than the initial answers of the individual.

RESULTS OF THE ANALYSIS OF THE DATA REGARDING ARMY SERVICE

Background and Characteristics - Males

The sample of men included in this study contained 80 who were drafted and 86 who enlisted. At the time they entered the Army, those who were drafted had an average age of 21 years and 5 months. Those who enlisted had an average age of 19 years and 11 months. In studying the background and reasons for enlistment of this group it became clear that a more meaningful division could be obtained by dividing the group into men whose entrance into the Army was motivated by the draft and a second group who entered the Army voluntarily without such pressure. Some of those in the first group, labeled "draft induced," actually enlisted when they were about to be drafted, and some of those in the second group asked to be drafted rather than enlisting. The greater homogeneity of the second classification is illustrated by the fact that the average age of the draft induced group, including 84 men, is 22 years and 1 month, and the average age of the voluntary group, including 82 men, is 19 years and 2 months. Approximately 90% of the group are white, and all but three of the others are black. Only 15% of the group were married or had been married at the time they entered the Army. Nearly all of these were in the draft induced group. Only six of the 166 had a child. Half the volunteers had no job or career plans when they entered the Army.

About 18% of the group had less than a high school diploma and about 10% had a college degree. A large proportion of those lacking the high school diploma entered the service voluntarily, and nearly all of those with the college degree were drafted.

The interest, ability, and information characteristics of the sample are readily seen on the profile on Figure 1. This also points up the differences between the mean scores of the draft induced group and the voluntary group. These scores are plotted in terms of the Project TALENT national male norms for the grade in which the individual was enrolled at the time he was tested in Project TALENT in 1960. The

● = Draft induced (mean scores)

▲ = Voluntary (mean scores

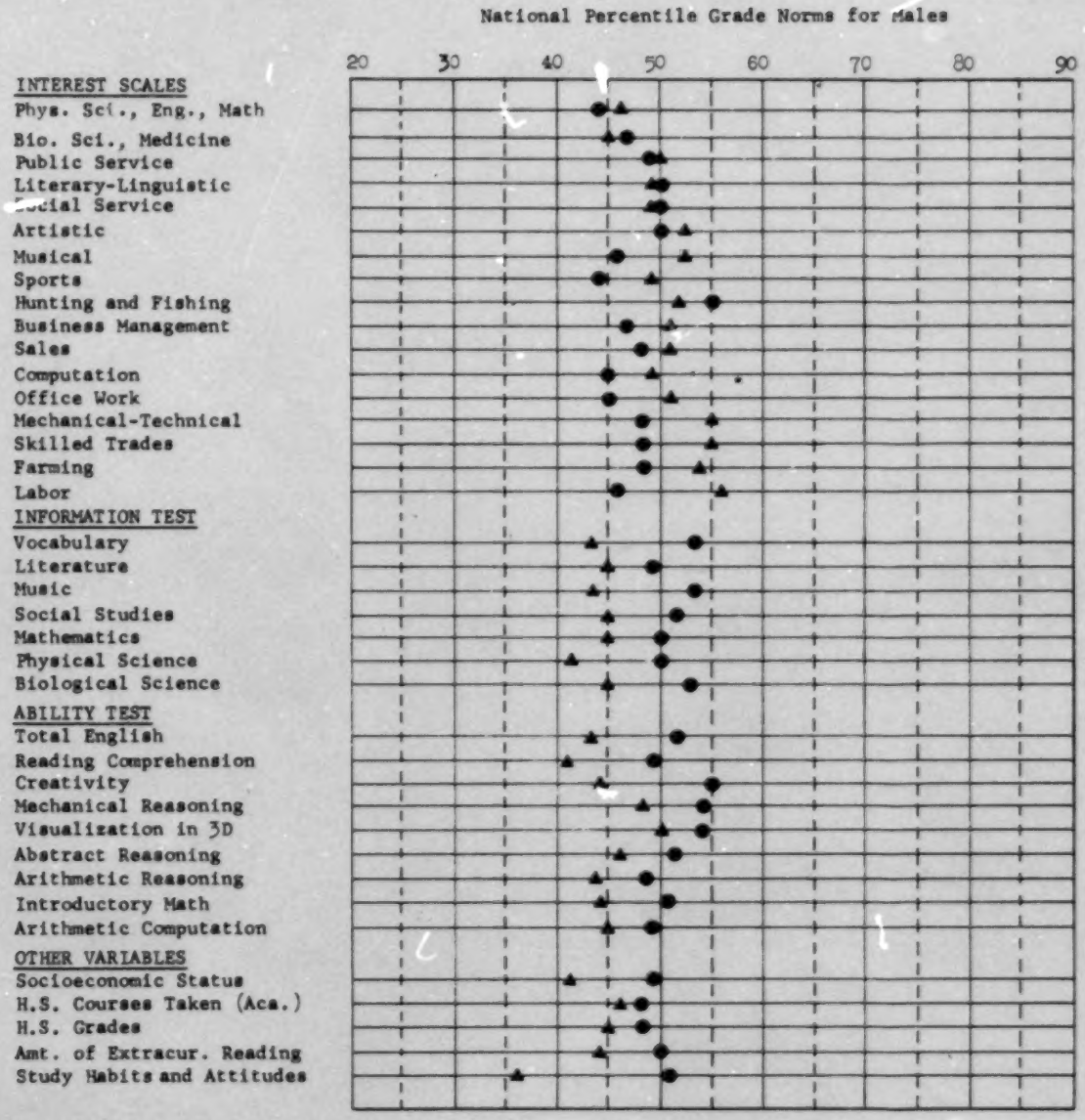


Figure 1. Profile of TALENT scores on 38 interest, information, ability, and other variables for draft induced (N=84) and voluntary (N=82) servicemen.

voluntary group is notable in the greater interest of the men in mechanical/technical, skilled trades, farming, and labor activities. The draft induced group have higher mean scores on all of the information and ability tests than do those in the voluntary group. The mean score for the voluntary group on the reading comprehension test is at the 41st percentile in terms of the national norms; the draft induced group is at the 49th percentile. The voluntary group has its lowest mean score on study habits and attitudes. This mean score is at the 36th percentile. By comparison the draft induced group's mean score on study habits and attitudes is at the 51st percentile. The socio-economic status of the voluntary group is also well below the mean for both the national norms and the draft induced group. The highest mean scores for the voluntary group are in Visualization in Three Dimensions and Mechanical Reasoning. In these tests their scores are at or very near the mean for the total national group.

Recruitment and Classification

Of special interest in terms of current recruiting for a volunteer Army are the reasons for enlisting for those not avoiding the draft or getting their obligation out of the way. Since these men are viewing their lives in perspective, their answers to the question of why they enlisted in the service are of special interest. The most frequently mentioned motivation was some type of personal development such as getting out on their own, finding themselves, meeting new people, acquiring discipline, and similar aspects of growing up. The next most frequent reason given for enlistment or requesting the draft was to obtain training which would prepare the individual for a job or career. Other frequently mentioned items included desire for travel, the urging of friends or family, the desire for job security, and the wish to get away from personal or family problems. In reply to a related question inquiring about expectations from Army service, the most frequent answers were: obtaining training, a chance for adventure and change, and general personal or social development.

Because of the strong interest in obtaining training among the men entering the Army voluntarily, it is of interest to examine the extent to which this training turned out to be valuable to them. The men who enlisted reported in most instances that they had some choice of training. About 81% indicated they had such a choice and that at least one option was of interest to them. About 71% of the enlistees reported that they desired a particular field, qualified for it, and got their choice. Unfortunately, these choices appear to have been made on the basis of very inadequate information, both about themselves and about the nature of the training and the job for which this would prepare them. Of the 62 men who enlisted and reported having a choice of training, somewhat less than half are now satisfied with the choice they made. Many of them looking back on this experience indicate that they were given very little guidance in making their choice of training.

Training and Utilization

In general the men in this group found the Army training of substantial interest to them. In answer to the question "How interesting was this training to you?" and "Why did you feel this way about it?" these men indicated that novelty and the opportunity to learn new things were the principal reasons for their interest. Other factors contributing to their interest included the potential usefulness of the materials and the methods used in the training courses.

When asked to recall a time when they learned a lot and why they learned a lot at this particular time, these men reported that the methods and instructors were the principal factors contributing to this type of effective learning situation. Similarly, in response to the question as to when they had trouble learning, more than half said they never had trouble learning. Those who did blamed the instructors and the training methods for their difficulties. When this group was aked what changes in training would improve the program, they had a number of suggestions relating to methods, instructors, and training conditions. The more frequent suggestions were to individualize training, to insure that the instructors were both qualified in the subject matter and knew how to teach, and to give the student more opportunity for practical experience, including the actual handling of equipment.

A noteworthy finding regarding this group was the extent of the voluntary education in which they engaged. For example, half of the men who enlisted for three years obtained some extra voluntary education. By contrast, only a quarter of the draftees took courses. Among the three-year men, 12% of the total group completed a GED; about 28% of this group took college courses. An interesting point is that nearly 90% of those who attempted some educational course of a voluntary nature, including preparation for the GED tests, completed it.

It appears especially significant that about two-thirds of the men who entered the Army without a high school diploma completed a GED while serving. The many other educational courses taken on a voluntary basis also made a distinct contribution to the quality of life of this group following their Army service.

It is of interest to note that 82% of the men who received training in the Army said they were able to use this training on an assignment. When asked for a specific time when they lacked skill or information needed to do an assigned job, 28% of the men reported such a situation. These instances were divided between situations requiring skill or information not included in their training courses and materials which were included in the training courses but which they did not learn.

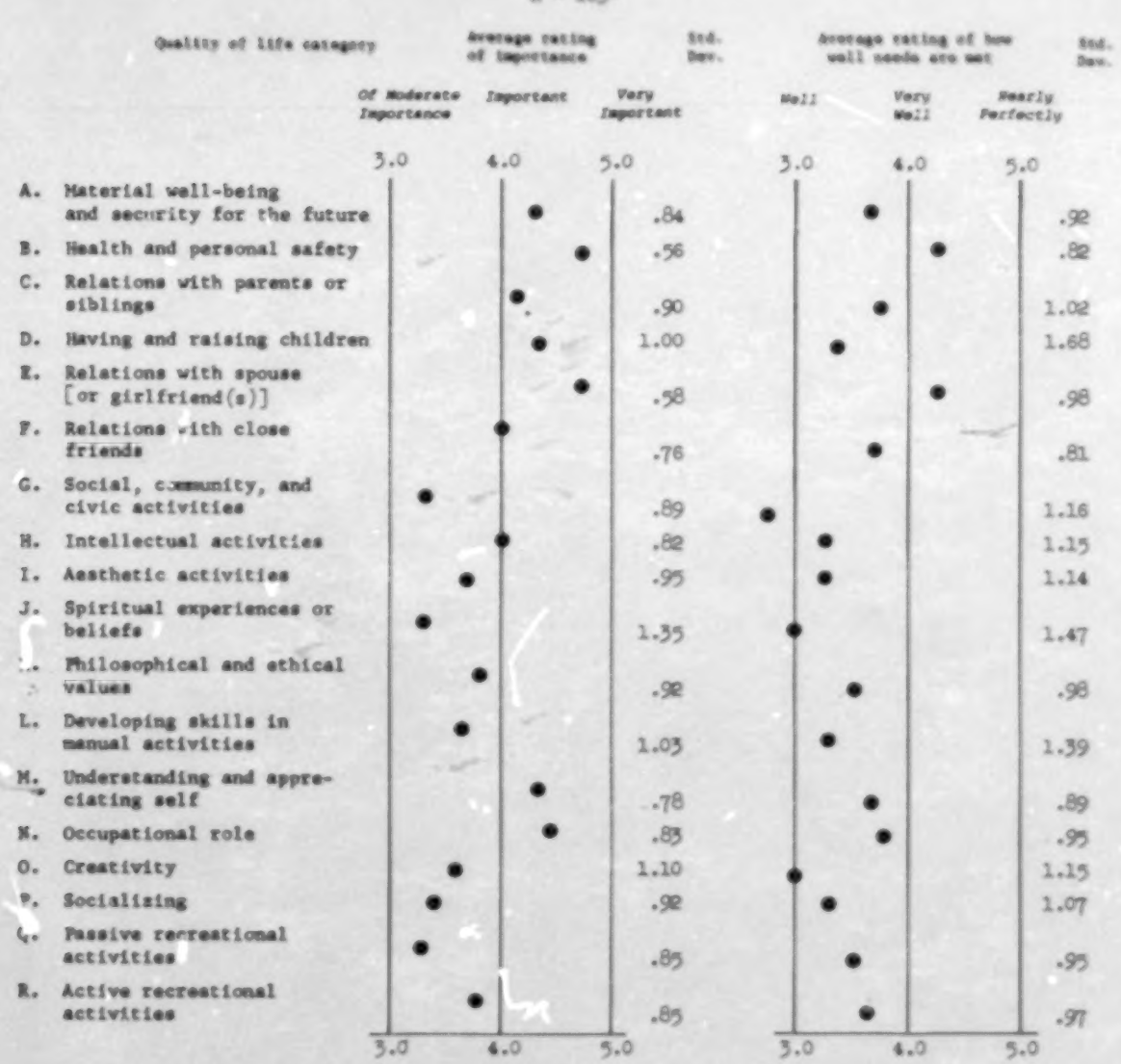
IMPACT OF ARMY SERVICE ON PRESENT QUALITY OF LIFE

The 166 men in this sample are now approximately thirty years old. Most are currently married (81%); about 10% have never been married; and the remainder were married at one time but are presently divorced. The group averages about 1 1/3 children per family. Twenty of these men completed a four-year college degree following their discharge from the service. The current occupations of these men are not very different from those of a representative sample of 30-year-olds.

At the end of the interview each of these men was asked to rate his own quality of life. First he was asked to indicate how important each of the 18 areas being used to define quality of life are to him at present. He was then asked to indicate how well his needs are being met in each of these areas. The results for the total Army veteran sample are shown in Figure 2. The three components of quality of life which these Army veterans indicated were of most importance to them at the present time were Health and Personal Safety, Relations with Wife, and Occupational Role. Most of the group rated these as either Important or Very Important to them. Of only slightly less importance to this group were Understanding and Appreciating Self, Having and Raising Children, and Material Well-Being and Security for the Future. The ratings assigned by these men averaged Important for Relations with Parents or Siblings, Relations with Close Friends, and Intellectual Development and Activities.

The other nine areas relating to such components as recreational activities, hobbies, and religious activities were rated as falling somewhere between Moderate Importance and Important. All of the nine components of quality of life rated by this group as Important were rated by them as areas in which their needs were somewhere between Well Met and Very Well Met. The three factors rated as most important by them are also rated as the areas in which their needs were best met.

Prior to carrying out this study on Army veterans, a pilot study was done on the quality of life of a sample of 33 Project TALENT 30-year-olds without Army service. The comparison between the ratings of importance and how well their needs were met for this pilot group with a group of men having Army service matched with them with respect to reading comprehension scores and socioeconomic status as determined while they were in high school provides an estimate of the effect of Army service for a sample of young men. In the left-hand column on Figure 3 it will be noted that the men with and without Army experience tend to rate the 18 factors similarly with respect to their importance for their quality of life. The small discrepancies shown are well within the anticipated errors expected from sampling with such size groups. The crucial comparison, of course, is in terms of how well these men estimate that their needs are being met at the present time in terms of those aspects of quality of life which are of most importance to them. It is clear that most of the differences between these groups favored the men with Army



* 3 cases with incomplete data omitted.

Figure 2. Reports of male Army veterans of the importance to them of each of 18 areas defining quality of life and similar reports of how well their needs are met in each area.

● = Army study men mean scores (N = 36)

■ = Pilot study men (no Army experience) (N = 33)

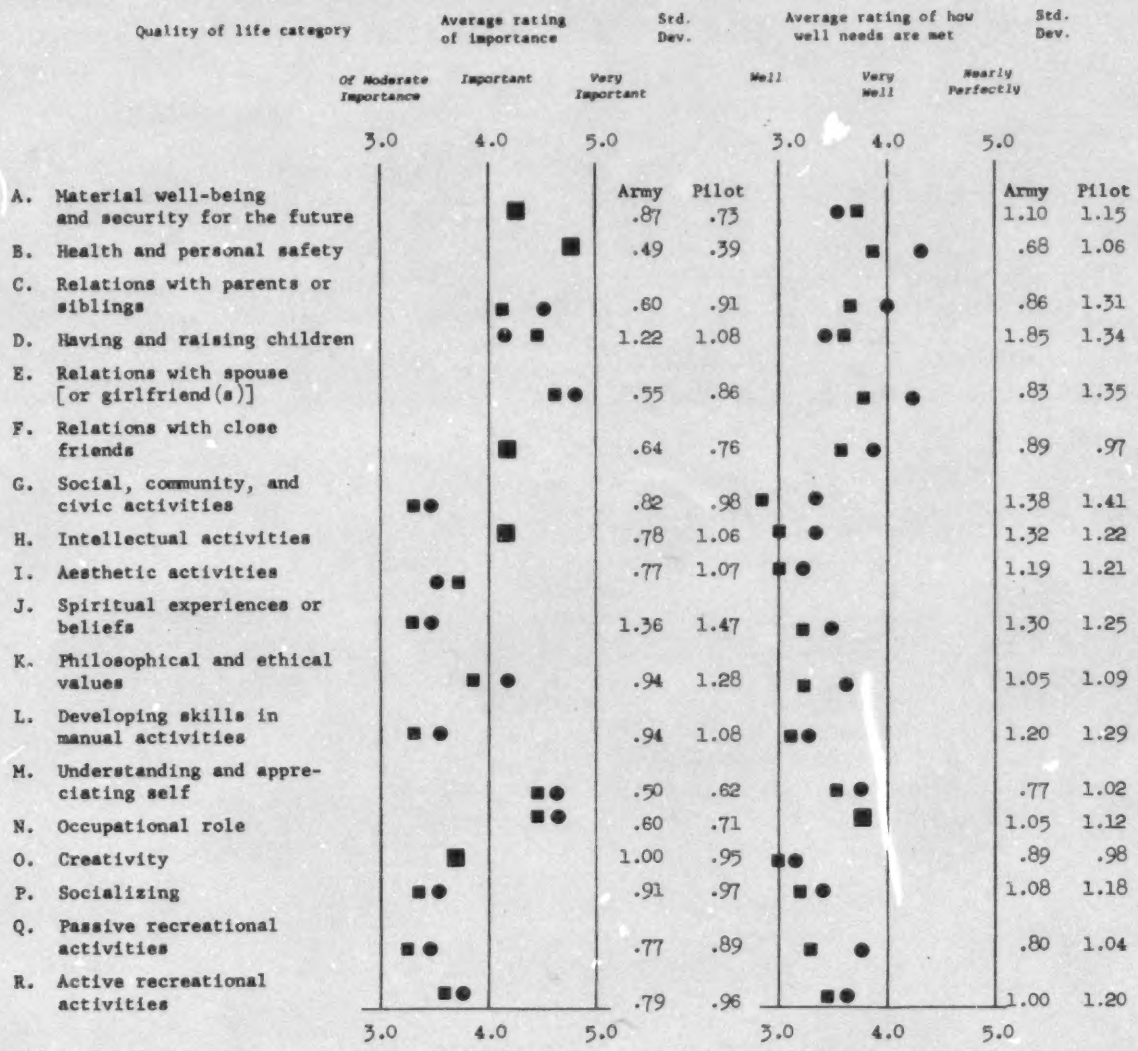


Figure 3. Reports comparing the importance to them and how well their needs are met for each of 18 areas defining quality of life for comparable groups with and without Army experience.

experience. Although the samples are small, these findings suggest that, contrary to some newspaper stories, the contribution which service in the Army made on the quality of these men's lives is predominantly positive. This appears to be especially true in some of the areas of most importance to these men such as Health and Personal Safety, Relations with Wife, Understanding and Appreciating Self, Relations with Parents or Siblings, and Relations with Close Friends. With respect to occupational role, both groups rate their needs as being equally well met. There is a small, practically negligible, difference favoring the group without Army experience with respect to Material Well-Being and Having and Raising Children.

To explore further the impact of Army service on these men's lives, we asked for their descriptions of times when something good or bad happened as a result of their Army service. In this sample the 166 men reported a total of 177 good effects of their service on some aspect of their quality of life and 65 specific bad effects. The good effects on the quality of life of these men included in order of times mentioned their present occupational role, their understanding and appreciation of themselves, their intellectual development, their recreational life, and their material well-being. The bad effects on their quality of life in order of times mentioned were their social life, their health, their occupational role, their material well-being, and their relations with their wives or girl friends. The above five listed items in each case account for about three-fourths of the good and bad items mentioned. The other fourth of the items are scattered among the thirteen other areas describing quality of life.

The men were asked to describe themselves and report their strengths and weaknesses at the time they entered the Army. Similarly, at the end of the interview they were asked to describe themselves now and discuss changes. The changes in their personality and general outlook that they report as having taken place during their service are much more often positive than negative, the ratio being about 7 to 1. Many of the men reported that they became more mature, more sophisticated, more appreciative of other cultures, better able to interact personally with others, more goal directed, more self-confident and more independent. Although the nature of this study does not make it possible to credit the Army with causing all of these changes, the study of the development of this group strongly suggests that many of these changes in individuals would not have occurred in many other environments.

A special study was performed to analyze the effects of Army service on career development. In terms of an overall judgment of the extent to which there was a positive or negative effect, it was judged that for more than half of the men in this group Army service had a positive effect with respect to their occupational role. The effect was judged to have been negative with respect to only about 8% of the men. For the remainder it was judged that service in the Army had a negligible effect on their present occupational activities. In studying these cases the

most frequently observed contributions of the Army to their present occupational role were in terms of appropriate training, development of new skills, experience in an area relevant to their present occupational role, the development of good work habits, the opportunity to study either in the Army or subsequently using the G.I. Bill, the development of leadership and management skills, the development of a sense of direction and confidence, and the development of a better understanding of people.

When asked what different Army experiences or changes in Army procedures would have been most helpful to them, 45% of the total group indicated that classification for more appropriate training would have been most helpful. The other frequently mentioned change was to improve the effectiveness of training or to provide more opportunities for college or correspondence school courses.

In this group of 166 men, 57 served at some time in Vietnam. A special study was made to determine the impact of this experience on their subsequent lives. It is believed that the setting of this interview and the timing provided a good perspective from which to view the impact of this experience.

About two-thirds of them reported no problems in readjusting to civilian life. Those who reported problems primarily experienced nervousness, anxiety, conditioning to noises, fireworks, and so forth. However, several reported fairly severe problems in coping with interpersonal and job stresses or felt they existed "in a daze" for some considerable period of time after they returned. Nine men in this group received wounds which have left some degree of remaining disability ranging from the loss of both legs, with the current probability of further degeneration necessitating additional surgery, to minor wounds which are apparently fully healed. These men spent an average of just under a year in Vietnam. There was a great deal of variability in the extent to which they had actual combat experience. Some spent practically their whole tour in Saigon or a relatively safe headquarters while others spent virtually their entire time in combat. On the whole it appears that this group is adjusting well to their return to civilian life. They are achieving a quality of life quite comparable to that of other groups.

RESULTS FOR A SAMPLE OF WOMEN WHO SERVED IN THE WOMEN'S ARMY CORPS

In addition to the sample of men which constituted the primary focus of the present study, interviews were conducted with 49 women who have served in the Women's Army Corps. The mean age of this group of women was almost identical to that of the men who entered the Army "voluntarily." Their age at entrance was 19 years and 1 month. They were much more homogeneous with respect to amount of education than the men; all but one had at least a high school diploma and only seven had one or two years

of college. Standards for enlistment have generally been more strict for women than for men; women have typically been required to be high school graduates (or have GED equivalence) and to have higher minimum scores on vocabulary and arithmetic reasoning tests than men. Figure 4 shows the profile of the mean scores of this sample of women on the Project TALENT tests they took in 1960. It should be noted that these mean scores are shown in terms of national percentile grade norms for females. On the interest scales the women show somewhat greater interest in physical science, engineering, and math and biological science and medicine than do the men, and somewhat lower scores on social service, art, and music. Otherwise, their profile is rather similar to that of the men, showing high scores in mechanical/technical, skilled trades, farming, and labor. The information scores for the women are somewhat above the average of the national norms, whereas for the men, particularly the volunteer group, they are somewhat lower than the national means. On the ability tests, as is the case for the men, their highest scores are on the Mechanical Reasoning and the Visualization in Three Dimensions tests. The women score appreciably higher than the men on most of the other ability tests except for English and Arithmetic Computation. As in the case of the men, their study habits are quite poor, their mean score falling at the 39th percentile for the national female norms. The high school grades of this group also are lower than the national average for women, their mean score falling at the 40th percentile.

The reasons of these women for enlisting in the service are quite different than those of the men entering on a voluntary basis. For the women, by far the most frequently mentioned reason is travel. The other very frequently mentioned reasons are getting away from family and personal problems and the opportunity to get education by way of the G.I. Bill. These three reasons are all mentioned much more frequently for the women than for the men enlistees. As for the men, the next most frequently mentioned items are personal development, usually in the form of being on one's own, getting training that might help them in a career, having a job with security, and school problems. This last reason is also one that is much more frequently mentioned by the women than the men as might be expected from the fact that although these women's ability levels are somewhat higher than those of the men who enter on a voluntary basis their grades are somewhat lower.

The women received quite different training from that received by the men, and did not consider it as interesting to the same extent as the men. More than 70% of them had training either as administrative specialists and clerks or in the medical and dental field, in areas in which they had already received training. The only other frequently mentioned courses were communications and intelligence, which included only a small percentage, and service and supply handlers, which had an even smaller percentage. Although about 53% of those who got training in the Army have used it in a comparable civilian field, for most of these women the Army has not led to any real career development. Most

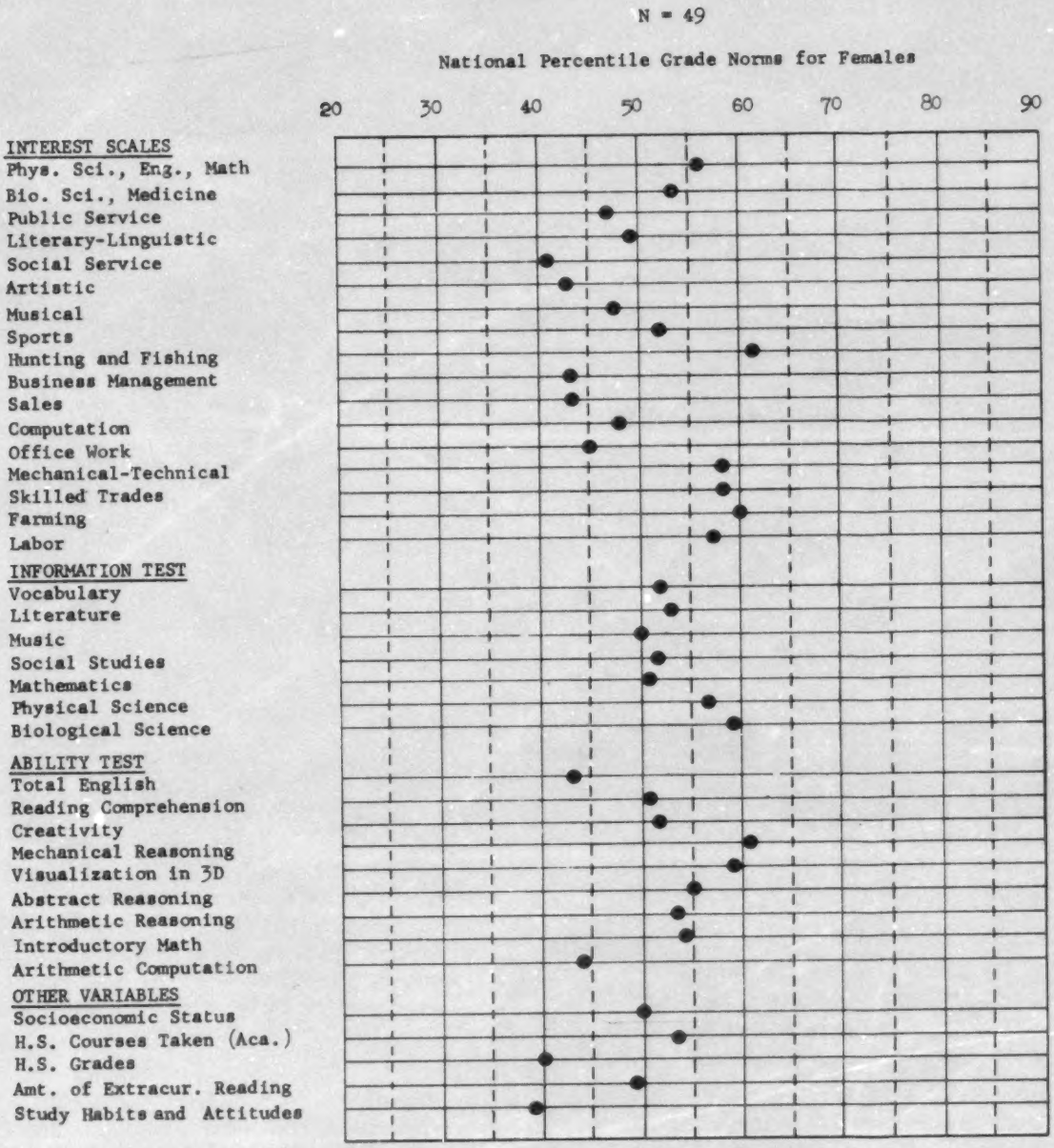


Figure 4. Profile of mean scores on 1960 TALENT tests for 38 interest, information, ability, and other variables for WAC sample.

of the women are in relatively low level positions and regard their jobs primarily as providing supplemental family income rather than as a step towards a career. In only two cases in this group--one relating to a woman receiving computer programming training and another receiving medical training--has their Army training per se led to career development and advancement.

One factor which distinguishes this group of women most from their male counterparts, however, is the transitory nature of their enlistment and service in the Army. Of this group of women, who were already selected to include only those who served in the Army more than six months, only 40% completed their first enlistment period. Social factors play a major role in affecting the service of these WACs. For example, 19 of these women married while they were in the Army. Most of them married men who were also in the Army. All but three of those who married left the Army before completing their first enlistment. These women left either when they married or when they became pregnant. Another six of the women in this group left the Army when they became pregnant but were not married. In this group, then, 22 of the 49 women failed to complete their first enlistment because of marriage or pregnancy or both.

Although it is clear that in dealing with the women we are concerned with Army service representing a much shorter period of time than for men, hence having less time to exert an effect, it seems important to examine their evaluations of their present quality of life. As shown in Figure 5 their ratings of the importance to them of these 18 components of quality of life are strikingly similar to those given by the men. The greatest single discrepancy is that the women indicate that Intellectual Development and Activities are of less importance to them than to the men. Aesthetic Activities and Spiritual Experiences are of slightly more importance to them than to the men. Occupational Role is also of somewhat less importance to them than to the men.

The ratings of this group of women with respect to how well their needs are met also paralleled the evaluations of the men in most respects. The women do indicate that their Relations with their Husbands do not meet their needs in these areas quite as well as reported by the men. They also report that their needs with respect to Occupational activities and Role are not quite as well met as reported by the men. Although this group of women reported Active Recreational Activities were as important to them as did the men, they indicate that their needs in this respect are much less adequately met.

Although no comparison is available with a comparable group of women without Army service at this point, the similarity between the ratings of men and women in other situations and the tentative results from this sample suggest that in the case of women also the Army is likely to have positive rather than negative effects on their quality of life. At the time of the interview 29 of the women were married, 5 were divorced, and 15 have never married. For 8 of the 29, this is their second marriage.

N = 49

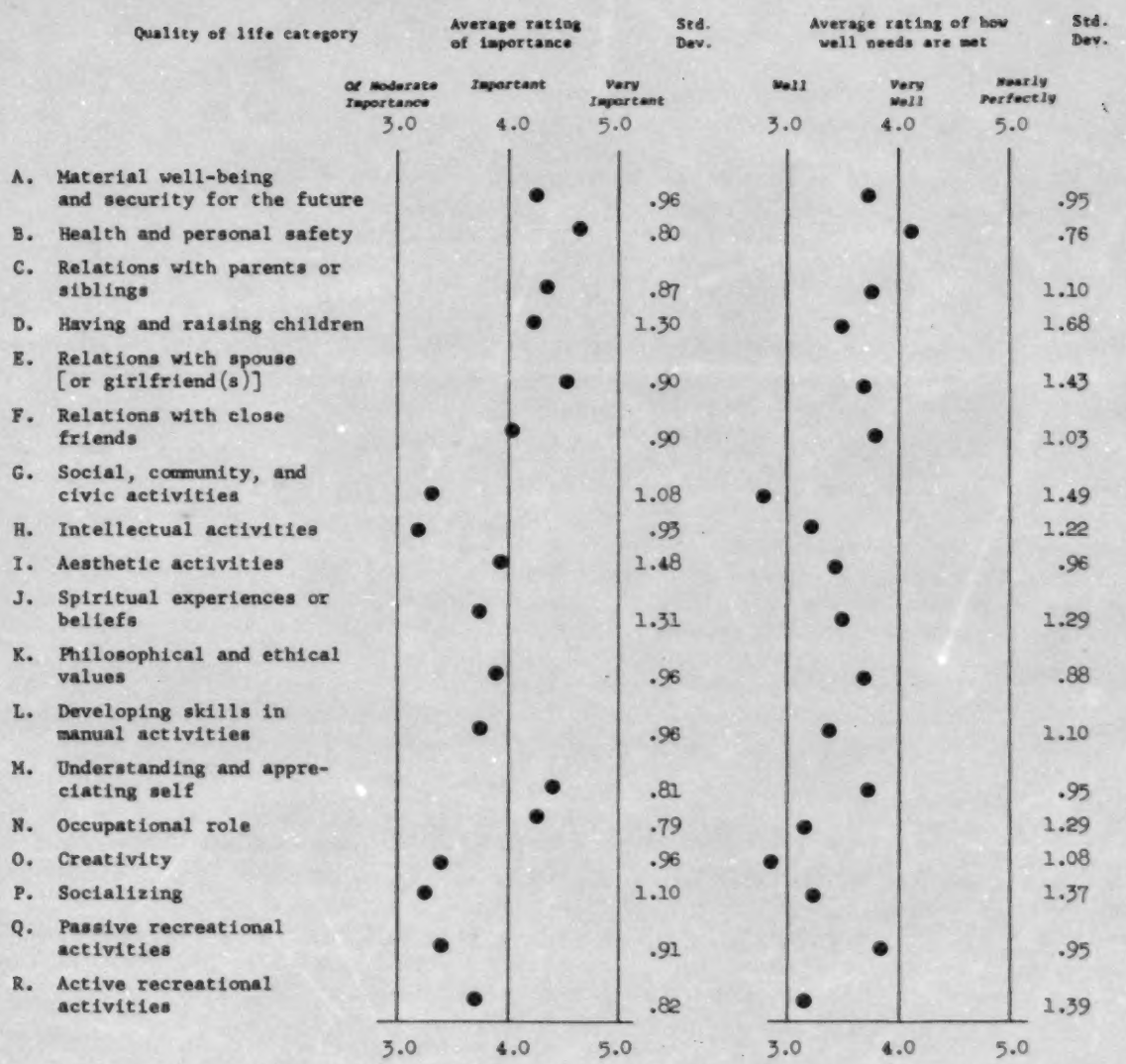


Figure 5. Reports of WAC veterans of the importance to them of each of 18 areas defining quality of life and similar reports of how well their needs are met in each area.

One of the divorced women has been married and divorced twice. Of the 15 women who have never married, 8 say they are dating men at least occasionally and 7 are apparently not dating at all. Two women have openly homosexual relationships. As a group these women have borne an average of 1.26 children each.

As indicated before, at the time they entered the Army many of these women were experiencing rather severe stress. Only six gave a self description that could be considered to reflect a positive attitude toward herself. Eight described themselves using adjectives such as "distraught," "lost," "extremely withdrawn," and "confused," while the common description generally was "naive," "immature," "extremely shy," "very inexperienced," "insecure," "chip on shoulder," "lonely," and so forth.

Their self-descriptions when they left the Army are considerably more positive. Thirty-one say they changed in positive ways--generally that they grew up and became more confident, resourceful, independent, and able to organize things. Four, however, said they changed in negative ways, becoming harder, distrustful, unwilling to work around many women, or more cynical. Eight said they did not change at all.

In general, it seems that the Army experience had some positive effect in bringing out very shy girls and helping them feel more at ease with other people. It also seems that there are major areas of their lives where a great need exists and where there is an opportunity for a substantial contribution, particularly to their career development, their self-understanding and appreciation, and their interpersonal relationships.

SUMMARY OF ARMY EFFECTS

The principal finding of this study of a group of 30 year olds who have had Army service is that for the group as a whole positive effects far exceed negative effects. For this group the number of good effects outnumbered the bad effects reported by a ratio of 3 to 1. Three of the areas showing a large number of good effects included Understanding and Appreciating Self, Intellectual Activities, and Active Recreational Activities. Very few bad effects were reported in these areas. The two types of bad effects most frequently mentioned were in relation to Socializing and Health and Personal Safety.

These men were asked to compare themselves before and after their Army service in terms of personality and general outlook. They reported positive effects outnumbering negative effects by about seven to one. The changes reported were in the direction of maturity, sophistication, appreciation of other cultures, ease in meeting and working with others, goal directed, independent, and confident.

A detailed analysis was made of these men's reports on their present quality of life. It was possible to make comparisons between the reports of a small national sample used as a pilot study prior to the initiation of the Army study and a group with Army service matched with them for reading comprehension and socioeconomic status as evaluated while they were in high school as indicated in the Project TALENT records. On these small comparison samples the men with Army service report their current needs with respect to the quality of their lives are being met slightly better than are the needs of those who had not had Army experience.

This finding is of great importance since it relates to men serving in the difficult times of the Vietnamese war. In the implications section some of the ways in which the contribution of Army service to the men involved can be significantly increased are presented.

These men rated the importance to them of each of the 18 factors in the tentative definition of quality of life for individuals. The six components rated as most important to them were Health and Personal Safety, Relations with Wife, Occupational Role, Understanding and Appreciating Self, Having and Raising Children, and Material Well-Being and Security for the Future. These men also supplied a rating on how well their needs were met in these areas. The mean ratings were Very Well Met except for Having and Raising Children. Their ratings indicated their needs in this area were Well Met.

A comprehensive analysis of the interview data was made on the effects of the Army experience on these men's occupational development and present occupational roles. The project's professional staff reviewed each of these men's development and present occupational status and made a judgment as to the extent to which the Army experience had had a positive or negative effect on this development and present status. For more than 50% of these men the effect was judged to be positive; for less than 10% it was judged to be negative. These effects were more marked both in a positive and a negative direction for the enlisted group than for the draftees. The positive effects related chiefly to appropriate training and the development of useful skills; to satisfying work experiences that improved his level of competence in relevant fields; to the development of confidence and occupational goals; to resources such as the G.I. Bill to enable him to gain needed education; to the development of good work habits; to the development of leadership and management skills; and to the development of a greater understanding of various types of people. The relatively small number of these men whose careers were negatively affected by the Army were placed in types of training (sometimes at their request) that were inappropriate to their interests and abilities and not satisfying to them.

At the same time that these positive and negative effects on the man's career were being noted, a record was kept of opportunities for the Army to make a significant positive contribution to his career development that were missed. Fully half of the missed opportunities related

to failure to be assigned to appropriate training. These missed opportunities were due in many instances to the man's lack of knowledge of his own interests and abilities and the requirements and nature of the training options available.

The most obvious finding regarding the women in this sample is that only 40% of those selected as having completed at least six months of Army service complete their first enlistment period. Many of them enlisted for poor reasons, such as school, family, or personal problems. The women did not regard the training they received as interesting to the same extent as the men. Many of those in this small group had training in nursing or simple typing or clerical skills in areas in which they had already received training.

These women indicated that they thought their assignments were productive. Very few of them felt that the work contributed significantly to their career development or personal growth. This group of women with service in the WACs rated the same six components of quality of life as of most importance to them except for Having and Raising Children. They rate this slightly lower than do the men.

They indicated their needs were Very Well Met in all six of these areas except for Occupational Role. In this area they rated their needs as only Well Met. They also rated Relations with Husband (or boyfriend) appreciably lower than the group of men did. These results suggest that for the women also the Army experience appears to make positive contributions to their overall quality of life, particularly in general personal growth--becoming more confident, resourceful, and at ease with other people.

IMPLICATIONS

One of the most striking findings from this study is that half the men who volunteered for Army service had no career or job plans at the time they entered the Army. They frequently said they wanted to find themselves and get training for an appropriate and satisfying career. When asked what changes in the Army procedures would have been most helpful to them, 45% of these men suggested they would like to see changes in the classification system that would help get more meaningful information on their own interests and abilities in relation to Army opportunities.

Although 81% of the enlistees said they had some choice in their assignment to training and 71% said they chose, were qualified for, and were assigned to a specific type of training, less than half of these men were satisfied with the choices they had made. These findings are to a great extent based on the classification procedures of 5 or 10 years ago, but they provide a very meaningful set of intensive case studies to use as a background for the systematic evaluation of present

procedures. The Army has a well established battery of tests that have been validated and have known predictive value for classification purposes. Interest tests are also available.

There is an indication that these tests, supplemented by other materials, need to become integral parts of a sophisticated life and career planning program. Such a program would make the classification into Army training and assignments a part of the individual's life and career planning program. The initial plans on entering the Army should include several options--some referring to specific Army careers and some plans for later civilian careers. The flexibility that comes from a full knowledge of desirable options provides a sound basis for strong motivation to learn and to develop along specific lines.

The second area needing change from the perspective of these former Army servicemen is training. A very large portion of the men found the contents of the Army training courses interesting. They reported that the principal factors influencing the extent of their learning included: teaching methods; instructor qualifications, motivation, and style; learning conditions; and apparent value of contents. Their suggestions for improvement related mainly to individualizing instruction and providing more opportunity for practical "hands-on" experience. In this group 81% reported that they used their training in assignments. However, 28% reported at least one specific instance when they lacked a required skill or piece of information that was important in carrying out an assignment. It also appears that some of the deficiencies reported by these men resulted from the problems created by fighting a war in a remote location with many special restraints and problems. However, a systematic survey of present training programs and procedures from the view of evaluating the extent to which they are based on modern educational technology would be a very worthwhile activity.

The findings for the women support especially the need for a more sophisticated and broadly based life and career planning program. They also support the need for greater individualization in training, since many of the women complained that their instruction was mainly devoted to things they already knew.

In conclusion, the intensive study of these 215 Project TALENT participants with at least six months of service in the Army suggests that the Army is helping these young people to improve the quality of their lives. However, it is clear that many opportunities exist in a large institution such as the Army for substantial improvement in the management of human resources. Many of the nation's schools are failing to provide adequate career guidance and adequate training. Although the Army cannot be expected to undertake major responsibility for these services, there is an excellent opportunity to make a significant improvement in the life planning activities of many of the nation's young people and at the same time improve the efficiency and effectiveness of its overall operations.

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